

<b>RTIP ID#</b> <i>(required)</i> ORA100511				
<b>TCWG Consideration Date</b> June 26, 2012				
<b>Project Description</b> <i>(clearly describe project)</i> The California Department of Transportation (Caltrans), District 12, in cooperation with the Orange County Transportation Authority (OCTA), proposes to widen State Route 55 (SR-55) in both directions from just north of the Interstate 405 (I-405)/SR-55 Interchange to just south of the Interstate 5 (I-5)/SR-55 Interchange. The project area is located along SR-55 in the Cities of Irvine, Santa Ana, and Tustin in Orange County, California.  The four project build alternatives are summarized below:  <b>Alternative 1:</b> Alternative 1 would add one general purpose lane southbound between McFadden Avenue and Edinger Avenue. Alternative 1 would also add one auxiliary lane in the northbound direction between MacArthur Boulevard and Dyer Road and between Dyer Road and Edinger Avenue, where no auxiliary lanes currently exist.  <b>Alternative 2:</b> Alternative 2 would add one general purpose lane (in each direction) within the project limits. Alternative 2 would also convert the existing auxiliary lane into a general purpose lane in the northbound direction between MacArthur Boulevard and Dyer Road and in the southbound direction between Edinger Avenue and Dyer Road and between Dyer Road and MacArthur Boulevard.  <b>Alternative 3:</b> Alternative 3 would add one general purpose lane (in each direction) within the project limits. In addition, all existing auxiliary lanes would be maintained and additional auxiliary lanes would be added in the northbound direction between MacArthur Boulevard and Dyer Road and between Dyer Road and Edinger Avenue.  <b>Alternative 4 (Alternative 5 from the PSR-PDS):</b> Alternative 4 would add one general purpose lane southbound between McFadden Avenue and Edinger Avenue. Alternative 4 would also add one additional HOV lane in each direction within the project limits. All existing auxiliary lanes would be maintained and additional auxiliary lanes would be added in the northbound direction between MacArthur Boulevard and Dyer Road and between Dyer Road and Edinger Avenue.				
<b>Type of Project</b> <i>(use Table 1 on instruction sheet)</i> Highway widening				
<b>County</b> Orange	<b>Narrative Location/Route &amp; Postmiles:</b> SR-55 PM 6.4-10.3 <b>Caltrans Projects</b>			
<b>Lead Agency:</b> California Department of Transportation				
<b>Contact Person</b> Charles Baker	<b>Phone#</b> (949) 724-2252	<b>Fax#</b> (949) 724-2256	<b>Email</b> charles_baker@dot.ca.gov	
<b>Hot Spot Pollutant of Concern</b> <i>(check one or both)</i> <b>PM<sub>2.5</sub></b> x <b>PM<sub>10</sub></b> x				
<b>Federal Action for which Project-Level PM Conformity is Needed</b> <i>(check appropriate box)</i>				
<b>Categorical Exclusion (NEPA)</b>	<b>X</b> <b>EA or Draft EIS</b>	<b>FONSI or Final EIS</b>	<b>PS&amp;E or Construction</b>	<b>Other</b>
<b>Scheduled Date of Federal Action:</b> Feb 2014				
<b>NEPA Delegation – Project Type</b> <i>(check appropriate box)</i>				
<b>Exempt</b>	<b>Section 6004 – Categorical Exclusion</b>	<b>X</b>	<b>Section 6005 – Non Categorical Exclusion</b>	

<b>Current Programming Dates</b> <i>(as appropriate)</i>				
	<b>PE/Environmental</b>	<b>ENG</b>	<b>ROW</b>	<b>CON</b>
<b>Start</b>	May 2011	Oct 2013	Apr 2014	Oct 2017
<b>End</b>	Jan 2014	June 2017	Apr 2017	Nov 2020
<b>Project Purpose and Need (Summary):</b> <i>(attach additional sheets as necessary)</i> The purpose of the proposed project is to provide congestion relief, improve traffic flow, and increase mobility on SR-55.				
<b>Surrounding Land Use/Traffic Generators</b> <i>(especially effect on diesel traffic)</i> Commercial and residential developments account for the majority of the land uses within the vicinity of the SR-55 widening.				
<b>Opening Year: Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility</b> <b>2020 – SR-55</b>  No Build; ADT = 173,900–291,200; Truck ADT = 10,100–16,900  Alt 1; ADT = 174,200–293,400; Truck ADT = 10,100–17,000  Alt 2; ADT = 174,800–295,400; Truck ADT = 10,100–17,100  Alt 3; ADT = 175,000–296,400; Truck ADT = 10,100–17,200  Alt 4; ADT = 174,200–293,800; Truck ADT = 10,100–17,000				
<b>RTP Horizon Year / Design Year: Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility</b> <b>2040– SR-55</b>  No Build; ADT = 187,100–303,100; Truck ADT = 10,900–17,600  Alt 1; ADT = 188,000–309,500; Truck ADT = 10,900–18,000  Alt 2; ADT = 190,200–317,200; Truck ADT = 11,000–18,400  Alt 3; ADT = 190,500–319,500; Truck ADT = 11,000–18,500  Alt 4; ADT = 188,200–311,900; Truck ADT = 10,900–18,100				

**Opening Year: If facility is an interchange(s) or intersection(s), Build and No Build cross-street AADT, % and # trucks, truck AADT**

N/A

**RTP Horizon Year / Design Year: If facility is an interchange (s) or intersection(s), Build and No Build cross-street AADT, % and # trucks, truck AADT**

N/A

**Describe potential traffic redistribution effects of congestion relief** *(impact on other facilities)*

See attached analysis

**Comments/Explanation/Details** *(attach additional sheets as necessary)*

See attached analysis

### **PM<sub>2.5</sub>/PM<sub>10</sub> Hot-Spot Analysis**

The proposed project is located within a nonattainment area for federal particulate matter less than 2.5 microns in diameter (PM<sub>2.5</sub>) and particulate matter less than 10 microns in diameter (PM<sub>10</sub>) standards. Therefore, per 40 CFR Part 93, hot-spot analyses are required for conformity purposes. However, the United States Environmental Protection Agency (EPA) does not require hot-spot analyses, qualitative or quantitative, for projects that are not listed in Section 93.123(b)(1) as an air quality concern. The project does not qualify as a project of air quality concern (POAQC) because of the following reasons:

- i. The proposed project is an expanded highway project. The proposed project would increase the capacity of SR-55 between I-405 and I-5. Based on the *Traffic Analysis* (Fehr and Peers, May 2012), the proposed build alternatives would increase the traffic volumes along SR-55. The average truck percentage along this segment of SR-55 is 5.8 percent. Tables 1 and 2 list the average daily traffic (ADT) and truck ADT volumes along SR-55 for the 2020 and 2040 conditions, respectively. Tables 3 and 4 list the increase in ADT and truck ADT for each build alternative for 2020 and 2040 conditions, respectively. The largest increase in ADT due to the proposed project is 18,400 vehicles per day. The largest increase in truck ADT due to the proposed project is 1,065 vehicles per day. These increases traffic volumes would not exceed the 125,000 average daily trips threshold or 10,000 truck trip threshold for a POAQC. In addition, as the project serves a commercial/residential area, the truck traffic percentage would not exceed the eight percent threshold for POAQC.
- ii. The proposed project does not affect intersections that are at LOS D, E, or F with a significant number of diesel vehicles.
- iii. The proposed project does not include the construction of a new bus or rail terminal.
- iv. The proposed project does not expand an existing bus or rail terminal.
- v. The proposed project is not in or affecting locations, areas, or categories of sites that are identified in the PM<sub>2.5</sub> and PM<sub>10</sub> applicable implementation plan or implementation plan submission, as appropriate, as sites of violation or possible violation.

Therefore, the proposed project meets the Clean Air Act requirements and 40 CFR 93.116 without any explicit hot-spot analysis. The proposed project would not create a new, or worsen an existing, PM<sub>10</sub> or PM<sub>2.5</sub> violation.

**Table 1: 2020 SR-55 Traffic Volumes**

Segment	No Build		Alt 1		Alt 2		Alt 3		Alt 4	
	ADT	Truck ADT	ADT	Truck ADT	ADT	Truck ADT	ADT	Truck ADT	ADT	Truck ADT
South of I-405	173,900	10,086	174,185	10,103	174,810	10,139	174,950	10,147	174,220	10,105
Between I-405 and Main Street	253,435	14,699	254,715	14,773	257,390	14,929	258,275	14,980	254,925	14,786
Between Main Street and Dyer Road	265,645	15,407	267,105	15,492	269,670	15,641	270,755	15,704	267,750	15,530
Between Dyer Road and Edinger Avenue	279,200	16,194	281,450	16,324	283,875	16,465	285,125	16,537	282,130	16,364
Between Edinger Avenue and McFadden Avenue	291,205	16,890	293,350	17,014	295,440	17,136	296,385	17,190	293,840	17,043
Between McFadden Avenue and I-5	256,880	14,899	258,395	14,987	260,325	15,099	260,990	15,137	259,165	15,032
North of Irvine Boulevard	223,435	12,959	223,885	12,985	224,210	13,004	224,390	13,015	224,155	13,001

Source: LSA Associates, Inc. and Fehr & Peers (May 2012).

**Table 2: 2040 SR-55 Traffic Volumes**

Segment	No Build		Alt 1		Alt 2		Alt 3		Alt 4	
	ADT	Truck ADT	ADT	Truck ADT	ADT	Truck ADT	ADT	Truck ADT	ADT	Truck ADT
South of I-405	187,145	10,854	188,015	10,905	190,175	11,030	190,475	11,048	188,195	10,915
Between I-405 and Main Street	266,010	15,429	270,060	15,663	278,490	16,152	281,260	16,313	270,810	15,707
Between Main Street and Dyer Road	281,290	16,315	285,845	16,579	293,885	17,045	297,200	17,238	287,875	16,697
Between Dyer Road and Edinger Avenue	292,890	16,988	299,810	17,389	307,170	17,816	311,245	18,052	302,140	17,524
Between Edinger Avenue and McFadden Avenue	303,130	17,582	309,455	17,948	317,150	18,395	319,495	18,531	311,890	18,090
Between McFadden Avenue and I-5	280,540	16,271	285,470	16,557	291,440	16,904	292,995	16,994	288,300	16,721
North of Irvine Boulevard	259,230	15,035	260,065	15,084	262,420	15,220	262,515	15,226	260,680	15,119

Source: LSA Associates, Inc. and Fehr & Peers (May 2012).

**Table 3: 2020 Change in SR-55 Traffic Volumes**

Segment	Alt 1 – No Build		Alt 2 – No Build		Alt 3 – No Build		Alt 4 – No Build	
	ADT	Truck ADT	ADT	Truck ADT	ADT	Truck ADT	ADT	Truck ADT
South of I-405	285	17	910	53	1,050	61	320	19
Between I-405 and Main Street	1,280	74	3,955	229	4,840	281	1,490	86
Between Main Street and Dyer Road	1,460	85	4,025	233	5,110	296	2,105	122
Between Dyer Road and Edinger Avenue	2,250	131	4,675	271	5,925	344	2,930	170
Between Edinger Avenue and McFadden Avenue	2,145	124	4,235	246	5,180	300	2,635	153
Between McFadden Avenue and I-5	1,515	88	3,445	200	4,110	238	2,285	133
North of Irvine Boulevard	450	26	775	45	955	55	720	42

Source: LSA Associates, Inc. and Fehr & Peers (May 2012).

**Table 4: Change in 2040 SR-55 Traffic Volumes**

Segment	Alt 1 – No Build		Alt 2 – No Build		Alt 3 – No Build		Alt 4 – No Build	
	ADT	Truck ADT	ADT	Truck ADT	ADT	Truck ADT	ADT	Truck ADT
South of I-405	870	50	3,030	176	3,330	193	1,050	61
Between I-405 and Main Street	4,050	235	12,480	724	15,250	885	4,800	278
Between Main Street and Dyer Road	4,555	264	12,595	731	15,910	923	6,585	382
Between Dyer Road and Edinger Avenue	6,920	401	14,280	828	18,355	1,065	9,250	537
Between Edinger Avenue and McFadden Avenue	6,325	367	14,020	813	16,365	949	8,760	508
Between McFadden Avenue and I-5	4,930	286	10,900	632	12,455	722	7,760	450
North of Irvine Boulevard	835	48	3,190	185	3,285	191	1,450	84

Source: LSA Associates, Inc. and Fehr & Peers (May 2012).